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Implementation of the proposals for action of the Intergovernmental Panel on Forests/Intergovernmental Forum on Forests and the plan of action of the United Nations Forum on Forests: progress in implementation

Forest conservation and protection of unique types of forests and fragile ecosystems

Report of the Secretary-General

Summary

The present report summarizes progress in the implementation of the proposals for action of the Intergovernmental Panel on Forests and the Intergovernmental Forum on Forests relating to the conservation and protection of unique types of forests and fragile ecosystems. Reference is made to national reports to the Convention on Biological Diversity and the Commission on Sustainable Development, among other sources. Analyses indicate that substantial progress has been made in establishing protected area networks in all regions of the world. Approximately 10 per cent of global forest area is currently under some form of protection, although the degree of protection varies significantly between different regions. However, current assessments of forest-protected areas fail to provide detailed information on the status of different forest types, except in a very general sense. Unique forest types of particular local or national importance are therefore poorly represented in global or regional analyses of protection.

The following priority actions are identified in this document: (a) strengthen the capacity of protected area managers to monitor and assess the status of biodiversity within protected areas, examine the impact of specific threats and incorporate the results of such analyses within management plans; (b) increase the effectiveness of protected areas, by increased stakeholder involvement in

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management of protected areas, including NGOs, local communities and the private sector; (c) create the necessary legal and institutional frameworks to ensure that such stakeholders are capable of taking advantage of increased opportunities for participation; (d) developed nations, international financial institutions and other donors should provide financial support and other resources to developing countries to support forest conservation and the implementation and management of protected areas, in accordance with national action plans, where such plans exist; and (e) use case studies to demonstrate the feasibility of public-private partnerships and the development of self-financing concepts and practices for forest conservation.

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I. Introduction

1. The proposals for action of the Intergovernmental Panel on Forests (IPF)/Intergovernmental Forum on Forests (IFF) relating to forest conservation and protection encouraged countries to develop and implement appropriate planning and management strategies for the representative protection and conservation of all types of forests; develop and implement methodologies and criteria to assess the adequacy, consistency, condition and effectiveness of protected areas and their management; and establish or expand networks of protected areas, buffer zones and ecological corridors in order to conserve biodiversity, particularly in unique types of forests.

2. In its resolution 1/1, the United Nations Forum on Forests established a multi-year programme of work to embody Economic and Social Council resolution 2000/35, defining concrete activities for the next five years, with a particular focus on implementation of the IPF/IFF proposals. The purpose of the present report is to support programme of work activities through to the review of progress and consideration on future actions scheduled for the fifth session of the Forum. Specifically, it has been prepared to support the deliberations of the Forum at its second session by describing progress made towards implementing the IPF/IFF proposals for action relating to the theme "Implementation of forest conservation and protection of unique type of forests and fragile ecosystems". The scope of the report has been limited by the short interval between the first and second sessions of the Forum and the lack of a formal monitoring and reporting system within the Forum, which should be borne in mind when considering its contents. It was prepared by the United Nations Environment Programme (UNEP) as the focal agency within the Collaborative Partnership on Forests for this programme element of the Forum. Inputs and comments from other Partnership members and the Forum secretariat were provided during the preparation process.

II. Background: summary of relevant IPF/IFF proposals for action

3. The IPF/IFF proposals for action contain numerous overlaps and inter-linkages, and vary in content from basic principles and guidelines to specific recommendations. For that reason, for the purposes of the present report, the proposals relevant to the theme "Implementation on forest conservation and protection of unique type of forests and fragile ecosystems" are summarized in table 1 in groupings of related actions, based on a practitioner's guide to the IPF proposals produced by the Six Country Initiative,[1] and an Australian summary of the IPF proposals for action (a number of proposals specifically related to indigenous peoples and traditional forest-related knowledge will be under discussion at the fourth session of the Forum and have therefore been omitted from the summary). The summarized proposals are not intended to replace the detailed negotiated text; in each case, references are provided to the relevant paragraphs of the IPF and IFF reports that contain the full text of the agreed proposals for action.

III. Implementation of the IPF/IFF proposals for action and of the plan of action of the United Nations Forum on Forests

4. Many local, national, regional and global forest conservation and protection activities have been undertaken that have contributed to the implementation of the IPF/IFF proposals for action. The present report attempts to provide an overview of such activities. However, there is currently no formal monitoring and reporting system within the Forum. The findings of the present report should therefore be considered as tentative and incomplete.

5. A wide range of sources has been consulted in an attempt to successfully report on actions towards implementation. In particular, reference was made to the national reports submitted by signatory countries to the Convention on Biological Diversity (in accordance with article 26 of the Convention). Many countries have or are in the process of submitting second national reports. All such reports available as of October 2001 were reviewed (55 countries in total). Where countries had not yet submitted a second national report, first national reports (approximately 75) were systematically reviewed and relevant information relating to IFF proposals for action extracted. That process was much more open to interpretation and relevant information hard to find, notably because first national reports were compiled and submitted to the Convention on an ad hoc basis, with very limited guidance, in contrast to the second reports.

6. Reference was also made to the national reports to the Commission on Sustainable Development, which specifically report on the implementation of Agenda 21, in response to General Assembly resolution 50/113. The information contained in those reports relating to forests varies substantially in detail. In addition, many of the reports have not been updated in several years, and are therefore of limited value for assessing national implementation of the IPF/IFF proposals. Profiles were consulted for 86 countries (for low forest cover countries, see E/CN.18/2002/7). Only 37 per cent of the reports referred explicitly to the IPF/IFF proposals. However, 51 per cent of countries reported that forest policies had recently been revised, often in the light of the IPF/IFF proposals.

7. In addition, the following sources were consulted:

- Reports of an Australian Government consultation on the theme "International forest conservation: protected areas and beyond", held in Canberra from 9 to 11 September 1998;[2]
- Reports of an open-ended international meeting of experts on special needs and requirements of developing countries with low forest cover and unique types of forest, held in Tehran in October 1999 (the so-called "Tehran Process");
- A Brazil/United States international expert meeting on protected areas, held from 15 to 19 March 1999 in San Juan, Puerto Rico;
- Reports of other relevant intersessional workshops and associated documentation (e.g., the "Six Country Initiative" and the "Eight-Country Initiative" (see http://www.un.org/esa/sustdev/forests.htm);

Table 1
Summary of relevant IPF/IFF proposals for action

Proposal for action	*Reference*	
	IPF[a]	*IFF*[b]
A. Implementation of forest-related decisions at the national level		
I. Develop and implement appropriate planning and management strategies for the representative protection and conservation of all types of forests on an ecosystem basis, incorporating the full range of forest values, including cultural, social, spiritual, environmental and economic aspects.	46 (c)	85 (a) and (b)
II. Develop and implement methodologies and criteria to assess the adequacy, consistency, condition and effectiveness of protected areas, and their management, incorporating reserve design principles that identify the need for new protected areas.		85 (e) 88 89
III. Establish or expand networks of protected areas, buffer zones and ecological corridors in order to conserve biodiversity, particularly in unique types of forests, working in close liaison with the parties to the Convention on Biological Diversity and other environmental agreements.	58 (b) (v)	
IV. Establish joint protected forest areas and guidelines for collaborative management of ecologically important or unique transboundary forests.		86
V. Develop and implement partnership mechanisms to engage forest owners, private sector, indigenous and local communities in the planning and management of forest conservation areas.		84 85 (b)-(d)
VI. Promote policies and regulations aimed at creating a favourable environment to attract domestic and foreign private sectors, as well as local community investment, for sustainable forest management, conservation and protection of forests.	69 (d)	
VII. Improve cooperation, coordination and partnerships in support of sustainable forest management within a national forest programme, by involving relevant stakeholders, including indigenous people, forest owners, women and local communities in forest decision-making, and by utilizing appropriate expertise in international organizations.	17 (b) 17 (f) 17 (h) 17 (i) 40 (e), (g) and (n) 77 (c) and (f)	19 (b) 64 (b) 66 140 (a)

Proposal for action	Reference	
	IPF[a]	IFF[b]
VIII. Develop financial support mechanisms to engage all interested parties, in particular forest owners and the private sector, in the planning and management of protected forest areas; and recognize protected forest areas under the stewardship of private forest owners or local communities.		85 (d)
IX. Develop and implement a range of innovative mechanisms for financing and encouraging forest conservation, including economic incentives, private contracts, taxes and charges, tax deductions, and possible returns from carbon sequestration, in accordance with and within the context of the implementation of relevant articles of the Kyoto Protocol, and to address cross-sectoral policies, structural adjustment packages and perverse incentives.		85 (f) 90
B. International cooperation in financial assistance and technology transfer		
X. Support and promote local community involvement in sustainable forest management through technical guidance, capacity-building and information dissemination, provision of economic incentives and legal frameworks, and by supporting direct participation of all interested parties in forest policy discussions and planning.	77 (f) 70 (c) 40 (b)	64 (f) and (i)
XI. Provide financial support to activities in developing countries related to forest conservation and to the implementation and management of protected areas in the surrounding landscape, in accordance with national action plans.		87
XII. Continue the implementation of various measures aimed at effective, equitable, development-oriented and durable solutions to the external debt and debt-servicing problems of developing countries, particularly the poorest and heavily indebted countries, including exploring the opportunities for innovative mechanisms, such as debt-for-nature swaps related to forests and other environmentally oriented debt reduction programmes.	67 (g)	
C. International organizations and multilateral institutions and instruments		
XIII. Contribute to a global and regional assessment of the status of protected forest areas.		85 (g)
XIV. Undertake efforts to achieve a common international understanding on concepts, essential terms and definitions used in developing criteria and indicators for sustainable forest management.	115 (d)	

Proposal for action	Reference	
	IPF[a]	IFF[b]
XV. Explore innovative ways to both use existing financial mechanisms more effectively and generate new and additional public and private financial resources in order to support activities for the management, conservation and sustainable development of all types of forests.	67 (f)	

[a] Numbers refer to paragraphs in IPF final report (E/CN.17/1997/12).
[b] Numbers refer to paragraphs in IFF final report (E/CN.17/2000/14).

- Responses to an informal questionnaire circulated to more than 100 national contact points; nine responses were received and analysed;
- Voluntary reports to the Forum Secretariat: four countries submitted preliminary voluntary reports on how they are organizing the assessment of progress and five countries submitted more complete reports;
- Members of the Collaborative Partnership on Forests and a number of both multilateral and non-governmental organizations were also invited to report on relevant activities undertaken.

8. Actions undertaken towards implementation of the proposals are summarized in the annex, with reference to the proposals for action listed in table 1.

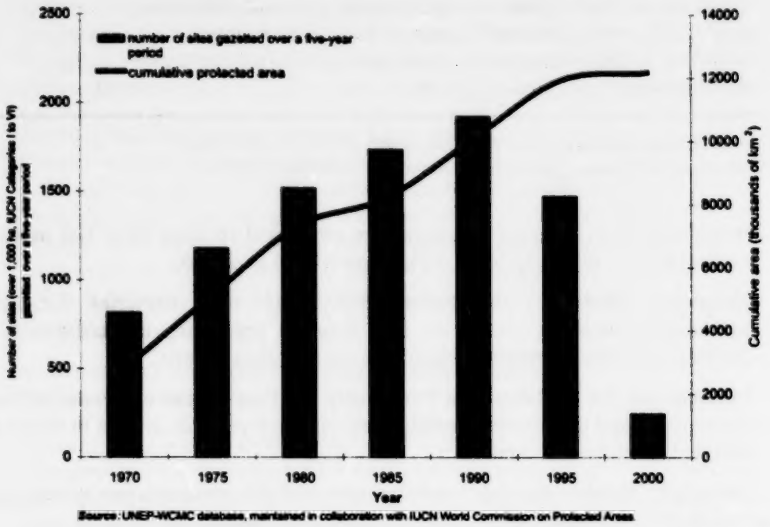
A. Progress in implementation

1. Country experience and lessons learned

9. Overall, the total area of the global network of protected areas has risen steadily over the past 30 years (see figure), although there is some indication that the rate of increase has declined in recent years.

10. With respect to forests, the proportion of forest area that is under some form of protection varies significantly between regions (see table 2), ranging from 4.2 per cent in the Middle East to 18.8 per cent in North America. The interpretation of such figures depends on how protected areas are defined. The definition of protected areas was the subject of particular debate at an intersessional expert meeting held in Puerto Rico in 1999. It was recognized that the definitions developed by the World Conservation Union (IUCN)/the World Commission on Protected Areas (WCPA) are being used by many countries and other groups, but also that the categories need to be adapted to encompass the wide range of forest protection regimes that exist within various countries. Several Governments expressed support for the work being led by IUCN/WCPA on the application of IUCN categories in the national context (particularly Australia, Ecuador, Brazil), which directly contributes to implementation of the relevant IFF proposal for action (see E/CN.17/2000/14, para. 89).

Development of the global network of protected areas



Source: UNEP-WCMC database, maintained in collaboration with IUCN World Commission on Protected Areas.

11. A second key issue relates to the effectiveness of protected areas, which can be assessed in terms of the protection of biological diversity, institutional capacity, social impacts and legal status. Methods for monitoring the effectiveness of protected areas are still relatively underdeveloped. Most monitoring efforts to date have been focused on the effectiveness of protected areas in terms of forest biodiversity conservation, which has proved difficult owing to the complexity of ecological systems, differing levels of biodiversity and difficult-to-measure management objectives.

12. Information provided by multilateral reporting on conventions and agreements relating to biological diversity, international, regional and local studies, research activities and practical action have highlighted a number of constraints to implementing the IPF/IFF proposals for action. The most important are:

- Inadequate finance, due to a decline in overseas development assistance (ODA), international debt and national and international economic crises;
- Inadequate institutional capacity and technical expertise;
- A lack of an appropriate political environment, political support and willingness;
- The existence of perverse incentives that adversely impact forest conservation objectives.

Table 2
Regional forest protection

Region	*Total forest cover (km^2)*	*Protected forest cover (km^2)*	*% forest protected*
Africa	8 177 548	759 293	9.3
Australasia	1 440 869	165 643	11.5
Central America	942 364	97 374	10.3
Caribbean	61 458	10 514	17.1
Continental South-East Asia	1 680 561	181 191	10.8
Europe	1 870 700	212 372	11.4
Far East	1 578 914	111 233	7.0
Insular South-East Asia	1 662 136	148 485	8.9
Middle East	287 526	12 030	4.2
North America	9 060 344	1 702 239	18.8
Russian Federation	9 994 587	187 034	1.9
South America	8 620 779	1 114 531	12.9
Total	**45 377 787**	**4 701 939**	**10.4**

Source: United Nations Environment Programme (UNEP)-World Conservation Monitoring Centre (WCMC), 2000.
Note: Protected forest according to IUCN management categories I-VI.

13. Other constraints to implementation identified by countries included:

- A lack of public and stakeholder participation, partly reflecting a lack of public awareness;
- A lack of information, reflecting limited capacity in research and information management;
- Difficulties encountered in the transition from state ownership of forests to increased private ownership and the transfer of responsibilities through decentralization and privatization;
- Inadequate involvement of some stakeholders, including women, ethnic groups and forest dwellers;
- Lack of coordination between donor activities;
- Incentives for rural populations to conserve their local forest resources are often weak or are offset by substantial disincentives;
- Governments often fail to provide the local organizations to which they devolve responsibility with sufficient real authority and support to enable them to exercise their rights and manage their forests effectively.

2. Emerging issues relevant to country implementation

14. One key emerging issue is that of effective protected area implementation and the issue of "paper parks". Strengthening and reinforcement of existing policies and

laws is needed in many countries in order to ensure adequate enforcement of legislation relating to biological diversity, forest conservation and protected areas. Forest encroachment and illegal harvesting of forest products are examples of negative activities that are having an impact on such areas. Command and control systems are still in place in many countries (establishing strict prohibitions that make their violation an offence and priority for more or less appropriate fines and penalties). That may lead to implementation gaps and also a rigid application of the law. The development of management guidelines for protected areas (strongly supported by WCPA and IUCN), as well as guidelines for the evaluation of management effectiveness, are contributing to improved effectiveness of protected area management.

15. In recent years, there has been an international drive towards the establishment of ecologically representative protected area networks, ensuring that the establishment of new protected areas focuses on those forest ecosystems that are nationally, regionally and/or globally unique, fragile or underrepresented. For that to be achieved successfully, there is a need to strengthen the capacity of countries to undertake assessments of the protection status of different forest ecosystems, and to effectively identify conservation priorities. Unique forest types are those forest ecosystems that require particular conservation attention because of their national, regional or global rarity or exceptional conservation importance. Examples include montane tropical cloud forests, mangrove forests, riparian forests and temperate rain forests. Fragile ecosystems are those that are particularly vulnerable to the impacts of forest loss and degradation owing to their limited capacity for ecological recovery. Examples include many semi-arid and Mediterranean forest ecosystems in low forest cover countries (see E/CN.18/2002/7).

16. The lack of appropriate financial and fiscal mechanisms to undertake forest protection is a major problem that affects many developing nations. Forest protected areas remain severely understaffed and underfunded in many countries. Moreover, there is a lack of trained personnel to develop and implement management plans. Institutional strengthening is needed as well as improved coordination between government departments responsible for forestry and conservation. However, the existence of paper parks also offers an opportunity to improve forest protection. Provision of financial support could greatly improve the security and management of such parks and promote sustainable livelihoods of communities in buffer zones, for example by increasing the involvement of local people in the management of protected areas.

17. The IPF/IFF proposals for action acknowledged the need for a landscape approach, in which the conservation of biological diversity, environmental services and other values are also accorded priority in the wider context of other forest management and land-use practices in surrounding areas. Implementation and enforcement of policies towards landscape management, biological diversity, forest conservation and protected areas are widely recognized to be inadequate in many areas.

3. Promoting public participation

18. At the global and regional levels a number of international NGOs (e.g. the World Wide Fund for Nature (WWF), Greenpeace, Friends of the Earth, Conservation International, the Nature Conservancy) have played a major role in

raising awareness of forest conservation and protection issues among the general public. Such organizations, as well as national NGOs and indigenous peoples' organizations, have undertaken similar successful activities at the local level. Many Governments and private organizations have also made significant progress in the development of infrastructure and outreach activities in order to encourage public access to protected areas (e.g., ecotourism) and increased benefits to local people. However, public education and awareness of the importance of forest conservation is still limited in many countries.

19. Analysis of second national reports to the Convention on Biological Diversity suggest that 72 per cent of countries submitting reports rank public education and awareness of high or medium priority; however, 70 per cent of respondents also indicate that the availability of resources for that purpose is limited or severely limited. Some 89 per cent of countries claim to support initiatives by major groups that foster stakeholder participation and that integrate biological diversity conservation matters in their education programmes, while 87 per cent of countries cooperate with other States and international organizations in developing relevant educational and public awareness programmes.

4. Enabling environment

20. National, regional and international experience has highlighted the enabling environment required for successful forest conservation. Examples include:

- A commitment to forest conservation (internationally and at country level);
- A supportive policy environment;
- Institutional reorientation;
- Availability of financial and human resources;
- The development of partnerships (local, private sector, NGO, as well as government).

21. Although many countries have made significant improvements in this area, support for forest protection continues to be of relatively low national priority in many countries, particularly in those where economic development and poverty alleviation are the prime concern. There is therefore a continuing need to link forest conservation with sustainable development projects and objectives.

22. In many developing countries, there is a need for external public funding to support capacity-building, the development of appropriate legal frameworks and the creation of the socio-economic conditions conducive to investing in forest conservation. Many developing countries face a general lack of funds and skilled people and problems of communication. As a result, practical implementation of national forest programmes and criteria and indicators for sustainable forest management need strengthening. On the other hand, in some countries undergoing rapid economic development, economic growth is being achieved at the expense of environmental conservation.

5. International and regional cooperation

23. Substantial efforts have been made to develop international and regional cooperation relating to forest conservation and protection, including:

- In Europe, the Ministerial Conference on the Protection of Forests in Europe developed a work programme on the conservation and enhancement of biological and landscape diversity in forest ecosystems, 1997-2000, which provides a basis for the establishment of a coherent ecological network of primary and other special forests at both regional and national levels;

- An example of support for the development of large-scale ecological corridors is provided by the Global Environment Facility (GEF), the World Bank, the Inter-American Development Bank and the United Nations Development Programme (UNDP), which have supported the Meso-American biological corridor initiative, the goal of which is to link existing intact segments of different ecosystems extending from southern Mexico through Guatemala, Belize, El Salvador, Honduras, Nicaragua, Costa Rica and Panama;

- The World Bank ecological corridors project is another example of the corridor approach to forest conservation and the further establishment of protected area networks. The project focuses on seven large rain forest "corridors" or "bioregions" located in the Amazon and Atlantic rain forest regions in Brazil. They comprise areas of exceptional biodiversity and encompass many of the existing protected areas, including federal, state, and municipal conservation units, private reserves and indigenous lands;

- IUCN, WCPA, WWF and the World Bank have played a major role in fostering international cooperation relating to protected areas, particularly in strengthening management effectiveness and in identification of key threats to protected areas and support to field projects, such as Mount Elgon and Kibali-Semliki in Uganda;

- In relation to unique forest types, the Tropical Montane Cloud Forest Initiative was formed in 1999 by WWF, IUCN, UNEP-WCMC, the Netherlands Committee for IUCN and the United Nations Educational, Scientific and Cultural Organization (UNESCO) International Hydrological Programme. It promotes the development of cloud forest conservation strategies, awareness-raising, site-level action and capacity-building for tropical montane cloud forest conservation;

- The International Tropical Timber Organization (ITTO) has facilitated the establishment and management of transboundary protected tropical forest areas, covering more than 8 million hectares (ha) spanning nine tropical countries in three regions. It has also developed a mangrove forest ecosystem work plan;

- The emerging Tehran Process and its secretariat provide an important means of cooperation and collaboration among low forest cover countries (see E/CN.18/2002/7).

B. Means of implementation

1. Finance

24. Lack of financial resources is widely acknowledged to be a major constraint to the implementation of the IPF/IFF proposals directed towards the conservation and protection of forests. However, there is a lack of detailed information on current financial flows affecting forests.

25. Innovative mechanisms for financing have been of particular importance in generating funds for forest conservation, the most important of which have been debt-for-nature swaps, which operate by offsetting financial debt for nature conservation by purchasing foreign debt, converting that debt into local currency and using the proceeds to fund forest conservation and protected area activities. Frequently implemented by NGOs and national Governments, they have often directly generated substantial funding for conservation, helped catalyse new institutions and indirectly provided lessons for conservation trust funds and other institutional reforms. They have often fostered participation from diverse sets of stakeholders, ranging from national monetary officials to grass-roots community organizations, and such international conservation NGOs as WWF/IUCN and Conservation International.

26. Non-profit funding sources, such as trust funds, are also emerging, principally to support the environmental and conservation activities of NGOs or community groups. Examples of successful conservation trust funds include the Brazilian Biodiversity Fund, the Bhutan Conservation Trust Fund, Colombia's ECOFONDO and the Mgahinga-Bwindi Impenetrable Conservation Trust in Uganda. Frequently, such funds are established with the support of such NGOs as WWF/IUCN and such multilateral organizations as UNDP, UNEP, the World Bank, GEF and donor support from overseas Governments.

27. Examples of other incentives and mechanisms used to provide finance for biodiversity conservation include:

- The polluter pays principle: penalty fees for discharges into the environment;
- Value added tax exemption for the environmental investment: purchases of equipment to monitor, control, and follow up the requirements of environmental law are not subject to value-added tax;
- Financial or tax incentives for the establishment of private protected areas and reserves, through the purchase of property with ecological functions (this has been aimed at the private sector with some success, especially in South America);
- Direct financial support for the establishment of forest conservation schemes and protected areas (in Europe this also encompasses agri-environment schemes).

28. The Kyoto Protocol to the United Nations Framework Convention on Climate Change sets up a framework for the transfer of emission credits between parties. Three flexible mechanisms were introduced that permit signatory countries to the Kyoto Protocol to meet their commitments partially or fully. The operational details of the Kyoto Protocol were finalized at the Marrakech meeting of the Convention held in November 2001, opening the way to widespread ratification by Governments

and the Protocol's early entry into force. A number of carbon sequestration and carbon conservation initiatives have been developed, including activities implemented jointly, under the Convention and land use change and forestry carbon projects. To date, there are 16 such approved international projects, covering approximately 3.5 million ha. Eighty-three per cent of that area is managed for the conservation of carbon in existing forests, either through forest protection (zero harvesting) or forest management (sustained production).

29. Sixty-five per cent of countries submitting second national reports to the Convention on Biological Diversity state that they have reviewed incentive measures promoted through the Kyoto Protocol and the United Nations Framework on Climate Change, although a few (approximately 16 per cent) are in the early stages of developing ways and means for implementing such incentives. Most have not started or are still considering such measures (62 per cent).

30. In the context of forest protection, GEF is a particularly important source of financial support. Between financial years 1992 and 2001, GEF provided about $1.4 billion to cover the incremental costs of biodiversity conservation in 446 projects in 123 countries. Between financial years 1991 and 2001, GEF allocation to projects within forest ecosystems account for almost 40 per cent of the entire biodiversity portfolio, with 87 projects and $538.2 million in GEF funding.[3] About 80 per cent of GEF projects in the current forest portfolio have focused largely on protected areas.

2. Transfer of environmentally sound technologies

31. There is an unprecedented accumulation of technological capability in the world today, including many developments with direct applicability to the forest sector. In particular, the use of remote sensing, geographic information systems (GIS) and information technologies are assisting in the monitoring and assessment of forest resources and in both managing and disseminating information. A number of countries report the development of forest resource information systems, which will give stakeholders access to a network of information and tools for sustainable forest management. However, there is clearly an ongoing need to make benefits of such technology available to a wider range of users, and to continue the process of technology transfer from developed to developing countries. Many technological developments remain unrecognized, underutilized or inadequately shared.

32. Parties to the Convention on Biological Diversity are specifically asked about the implementation of article 16 of the Convention (Access to and transfer of technology). Seventy per cent of all countries submitting second national reports consider the implementation of the article and associated decisions of high or medium importance. However, 71 per cent of countries submitting second national reports have limited or severely limited resources available to meet obligations and recommendations under the article. Approximately half of all countries have taken measures to provide or facilitate access for and the transfer to other contracting parties of technologies that are relevant to the conservation and sustainable use of biological diversity.

3. Capacity-building

33. Many countries have identified the need for capacity-building to help implement the IPF/IFF proposals for action. A large proportion of developing

nations report that their human resource base lacks funding and appropriate management, planning and implementation skills. In particular, there is a need for:

- Strengthening capacity to develop and implement planning and management strategies for forest conservation;
- Approaches for monitoring the effectiveness of protected areas, including assessment of threats, and assistance in application of criteria and indicators for monitoring effectiveness of management;
- Strengthening of institutions and technical expertise in policy development and implementation, to provide an appropriate enabling environment for forest conservation.

34. International organizations, such as UNDP, ITTO, UNEP, the Centre for International Forestry Research (CIFOR) and WWF/IUCN, play a major role in building capacity in such areas, supported by national Governments. However, in the context of the present report, there is a clear need to strengthen the capacity of countries to analyse forest protection, with particular reference to the conservation of unique forest types, and to develop and strengthen national policies in response to the results of such analyses. There is also a clear need to disseminate and publicize more widely successful initiatives in this area. In addition, in order to increase stakeholder involvement, there is a need to strengthen and establish technical assistance centres to develop databases of projects and legal information on forest legislation and rights, inventories of experiences and successful application of technologies. Well established forestry research institutions exist only in a few countries, with many still concentrating their research efforts on technical forestry problems. There is a need for such institutes to devote greater attention to environmental and socio-economic issues, as pursued, for example, by CIFOR.

IV. Conclusions

35. Analyses indicate that substantial progress has been made in establishing protected area networks in all regions of the world. The total area of the global protected area network continues to increase, although there is some evidence that the rate of increase is declining. Approximately 10 per cent of global forest area is now under some form of protection, although the degree of protection varies significantly between different regions. Those regions characterized by a low proportion of forests that are protected should be accorded relatively high priority in future conservation initiatives.

36. Progress has also been made in assessing the status of forest protection, both globally and regionally. The development and application of remote sensing and GIS technologies have improved information about the distribution and extent of forests throughout the world. There is still a need, however, to ensure that the benefits of such technologies are adequately shared, and many countries have highlighted the need for capacity-building in the collection, use and dissemination of information relating to forests. Capacity-building is also required in the application of protected area classification systems at the national level.

37. However, current assessments of forest protected areas fail to provide detailed information on the status of different forest types, except in a very general sense. Unique forest types that are of particular local or national importance are therefore

poorly represented in global or regional analyses of protection. Forest types of particular importance for biodiversity conservation or rural livelihoods, such as tropical montane cloud forests, mangrove forests and riparian or flooded forests, require specific attention in future analyses of protection. Such analyses should also assess the extent to which the coverage of protected area networks are adequate in relation to other conservation objectives, such as areas of high biodiversity or endemicity. There is a clear need to strengthen the capacity within many countries to undertake such analyses, and to incorporate the results within policy initiatives. Without such action, there is a risk that nationally or globally important forest areas will continue to suffer deforestation and forest degradation.

38. It is clear that the designation of a forest area as protected is not in itself sufficient to guarantee its effective conservation. The effectiveness of the management of protected areas is therefore of critical importance to conservation efforts. Activities led by IUCN and WCPA towards strengthening the management of protected areas, through the provision of practical tools and technical support, are widely recognized as of major importance in this context. In particular, there is a need to strengthen the capacity of protected area managers to monitor and assess the status of biodiversity within protected areas, to examine the impact of specific threats and to incorporate the results of such analyses in management plans.

39. There has been an undoubted international trend towards increased stakeholder involvement in the management of protected areas, including NGOs, local communities and the private sector.

40. There is increasing recognition of the social and cultural benefits of forest conservation and of the need to explore the convergence of interest of indigenous and local communities and of protected forest areas, with the aim of allowing the effective participation of all interested parties.[4] There is, however, a need to create the necessary legal and institutional frameworks to ensure that those stakeholders are capable of taking advantage of increased opportunities for participation. Increased stakeholder involvement also depends on increased public awareness of the importance of forest conservation. Although progress has been made in this area, some countries report public apathy towards forest conservation efforts, or note that conservation is accorded relatively low priority because of the pressing needs to alleviate poverty or for economic development.

41. It is also recognized that protected areas by themselves are not sufficient to conserve forest ecosystems and their associated biodiversity. Protected areas should form part of a landscape continuum, in which the conservation of biological diversity, environmental services and other values are also accorded priority in the wider context of other forest management and land-use practices in surrounding areas. Many countries have adopted legislation, policies and strategies towards integrated landscape management, incorporating goals relating to forest conservation and protected areas. However, implementation and enforcement of those policies and laws in many countries is inadequate.

42. There is an ongoing need for developed nations, international financial institutions and other donors to provide financial support and other resources to developing countries, and to support forest conservation and the implementation and management of protected areas in accordance with national action plans, where such plans exist. Where they do not exist, policies need to be urgently developed. In many developing countries, institutional strengthening and capacity-building,

research and education and public awareness, promotion of access, development and transfer of environmentally sound technologies, and technical and scientific cooperation are underdeveloped or in great need of financial support.

43. To provide such support, innovative financing mechanisms can be of particular value;[5,6] there is a need to use case studies to demonstrate the feasibility of public-private partnerships and of the transition of forestry development to self-financing concepts and practices. There is also a clear need to use available financial resources more efficiently. Increased coordination between donors at the national level could make a significant contribution to achieving that objective.

V. Points for discussion by the Forum

44. The Forum may wish to:

(a) Invite countries, with the assistance of UNEP, FAO and CIFOR, together with IUCN, WCPA and WWF, to collaborate on assessing the status of protected forest areas, including analysis of threats, with particular emphasis on fragile or unique forest ecosystems, and on strengthening capacity to undertake such assessments at the national level;

(b) Invite the donor community to support developing countries to increase the management effectiveness of protected areas, building on the IUCN/WCPA framework, and incorporating capacity-building programmes, including application of monitoring and assessment techniques, and the incorporation of assessment results into management plans;

(c) Invite countries to undertake case studies and share lessons learned in the application of the landscape approach to forest conservation;

(d) Request the ad hoc expert group on finance, to be established at the second session of the Forum, to:

(i) Consider the feasibility of a mechanism for South-South knowledge exchange on national funds and other innovative mechanisms for financing action for forest conservation;

(ii) Use case studies to demonstrate the feasibility of public-private partnerships and of the transition of forestry development to self-financing sustainable forest management practices;

(iii) Create a mechanism for donor coordination suitable for the implementation of forest conservation activities at the national level and for communicating the needs of developing countries to relevant national developed country aid agencies, international organizations and instruments with the mandate and capacity to address those needs.

Notes

[1] Food and Agriculture Organization of the United Nations (FAO)/United Nations Development Programme (UNDP), "Practitioners guide to the implementation of the IPF proposals for action", paper prepared in support of the work of the Intergovernmental Forum on Forests.

[2] See P. J. Kanowski et al., *International Forest Conservation: Protected Areas and Beyond* (Commonwealth of Australia, 1999).

[3] See A. Madhvani, *An Assessment of Data on ODA Financial Flows in the Forest Sector* (London, Overseas Development Institute, 1999).

[4] See C. J. P. Colfee and Y. Byron, *People Managing Forests: The Link Between Human Well-being and Sustainability* (Washington, D.C., Resources for the Future and Centre for International Forestry Research, 2001).

[5] See M. E. Chipeta and M. Joshi, eds., *Financing Sustainable Forest Management* (Bogor, Indonesia, Centre for International Forestry Research, 2001).

[6] See M. E. Chipeta and M. Joshi, eds., *The Private Sector Speaks: Investing in Sustainable Forest Management* (Bogor, Indonesia, Centre for International Forestry Research, 2001).

Annex

Progress in implementation of forest conservation and protection of unique types of forests and fragile ecosystems

Proposal for action	*Action towards implementation*
A. Implementation of forest-related decisions at the national level	
I. Develop and implement appropriate planning and management strategies for conservation of all types of forests	• Actions are referred to in approximately 20 per cent of national reports to the Commission on Sustainable Development, although little information is given on the representativeness of conservation strategies, or on the range of values incorporated within the planning process. • First national Convention on Biological Diversity reports state that 98 per cent of countries have some sort of protected areas system in place; 52 per cent of countries indicate that some sort of planning and management strategy is in place, although details for evaluations of such strategies are not given; 11 per cent of countries plan to engage in formulating such strategies. • Second national Convention on Biological Diversity reports indicate that 13.5 per cent of countries have a protected area system under development, 22 per cent have a national review of protected areas in place, 16 per cent have a national protected areas plan in place and 49 per cent have a relatively complete system in place.
II. Develop and implement methodologies to assess the condition and effectiveness of protected areas	• No relevant actions referred to in national reports to the Commission on Sustainable Development. • First national reports to the Convention on Biological Diversity suggest that approximately 25 per cent of responding nations have some method of assessing and evaluating protected area management effectiveness; 44 per cent of countries indicated that they were planning, were in the process of developing or aimed to have such methodologies in place in the future. • Second national reports to the Convention on Biological Diversity ask countries whether there are nationally adopted guidelines for the selection, establishment and management of protected areas; 8 per cent of responding countries state that there are not, 19 per cent that they are under development, 49 per cent that there are and 24 per cent that existing guidelines are undergoing review and extension. • WWF has been developing and implementing a rapid assessment and prioritization methodology to provide policy makers and park managers with an appropriate tool to assess the management status of protected area systems. The methodology has been field-tested in Algeria, Cameroon, France and Gabon, and is currently being implemented in China, the Russian Federation and South Africa.

Proposal for action	*Action towards implementation*
III. Establish or expand networks of protected areas, buffer zones and ecological corridors	• An estimated 12 per cent of the world's forests are in protected areas (FAO, Global Forest Resources Assessment 2000). • Actions are referred to in approximately 19 per cent of national reports to the Commission on Sustainable Development. However, little reference is made in reports to unique types of forests, or the use of buffer zones/ecological corridors. • Unique types of forests include tropical montane cloud forests and mangrove forests. Statistics suggest that globally, about 16 per cent of tropical montane forests are protected; the figure for mangrove forests is 13.8 per cent. • Some 72 per cent of countries indicated in first national reports to the Convention on Biological Diversity that they plan to expand their protected areas. • Second national reports to the Convention on Biological Diversity indicate that the ecosystem approach to forest conservation and sustainable use is being implemented by 89 per cent of responding countries; 11 per cent of respondents indicated that that was not occurring. • As of September 2001, 94 countries have established 411 biosphere reserves, according to UNESCO Man and Biosphere designations. • The World Bank ecological corridors project is another example of the corridor approach to forest conservation and the further establishment of protected area networks. The project focuses on seven large rainforest corridors or bioregions located in the Amazon and Atlantic rainforest regions in Brazil. • The pan-European work programme on the conservation and enhancement of biological and landscape diversity in forest ecosystems aims to conserve all types of forests in Europe and is complemented by European Community research programmes on indicators for forest biodiversity, as well as programmes on natural forests and forest reserves. • The European Community has created Natura 2000 to develop a cohesive European network of representative protected sites, including many forest sites, by 2004.

Proposal for action	*Action towards implementation*
IV. Establish joint protected forest areas and guidelines for management of transboundary forests	• Only 12 per cent of countries refer to transboundary protected areas in first national reports to the Convention on Biological Diversity. • Second national reports to the Convention on Biological Diversity ask whether countries have developed management practices for transboundary protected areas; 22 per cent indicate that they have not, 58 per cent that they have to a limited extent, 8 per cent that they have to a significant extent and 12 per cent that the question is not relevant. • The number of transboundary protected areas is now growing around the world. In 1988, there were only 59 such areas, mainly concentrated in Europe and North America; by 1998, that figure had increased to 136 in 98 different countries, the greatest concentration being Europe and Africa. • More than 8 million ha of transboundary protected tropical forest areas have been established among nine ITTO tropical countries in the three tropical regions of the world. • Seven transboundary protected areas are inscribed on the UNESCO list of Natural World Heritage sites. • ITTO has developed a mangrove forest ecosystem work plan.
V. Develop and implement partnership mechanisms to engage forest owners, local communities in the management of forest conservation areas	• Actions are referred to in approximately 5 per cent of national reports to the Commission on Sustainable Development. • According to first national Convention on Biological Diversity reports, 40 per cent of respondents indicated that they are engaged in partnership mechanisms to involve forest owners, local communities and the private sector in management and planning of forest conservation areas; the degree or level of involvement is not given; 25 per cent of respondents indicate that this is planned or an aim for the future. • Second national reports to the Convention on Biological Diversity indicate that approximately 65 per cent of countries have undertaken measures to involve some stakeholders, while 30 per cent were yet to involve all stakeholders and 8 per cent have not undertaken any measures.
VI. Promote policies aimed at creating a favourable environment	• No relevant actions were referred to in national reports to the Commission on Sustainable Development. • No relevant actions were described in first national reports to the Convention on Biological Diversity. • Second national reports to the Convention on Biological Diversity indicated that 30 per cent of countries are taking no action in this area, 40 per cent are in the early stages of development, 13 per cent are in an advanced stage of development and 13 per cent have frameworks in place.

Proposal for action	*Action towards implementation*
VII. Improve cooperation, coordination and partnerships in support of a national forest programme	• Although most countries have national forest programmes in various stages of development, surveys by FAO indicate that such programmes are being implemented in only 44 per cent of countries; many have stalled owing to a lack of human, institutional and financial resources, as well as the absence of adequate policies, coordination and public participation mechanisms. • Relevant actions are referred to in 38 per cent of national reports to the Commission on Sustainable Development, although national forest programmes are not always referred to explicitly; however, information on the degree of stakeholder participation is often very limited. • The FAO Global Forest Resources Assessment 2000 indicated that 89 per cent of forests in industrialized countries are being managed according to a formal or informal management plan. Many developing countries are unable to provide national statistics on such activities.
VIII. Develop financial support mechanisms to engage all interested parties in the planning and management of protected forest areas	• No relevant actions referred to in national reports to the Commission on Sustainable Development. • Convention on Biological Diversity first national reports indicate that few countries have active financial mechanisms and incentives in place, especially involving full participation of the local community and relevant stakeholders; rather, they are objectives as part of national biodiversity strategies and action plans. • Information identified within first national reports to the Convention on Biological Diversity indicate that financial support mechanisms are in place for approximately 56 per cent of responding countries; 24 per cent make direct reference to such mechanisms as being lacking and/or being planned for implementation in the near future.
IX. Develop and implement a range of innovative mechanisms for financing forest conservation	• Actions are referred to in approximately 5 per cent of national reports to the Commission on Sustainable Development. • First national reports to the Convention on Biological Diversity make very little direct reference to existing or developing incentives: 28 per cent indicate that some kind of incentive (pollution taxes, user fees, subsidies) may be in place, but concrete examples are rarely given; 18 per cent of responding countries indicate that the development of such incentives is planned in the future or is currently beginning. • Incentive measures are afforded high or medium priority in 94 per cent of countries currently submitting Convention on Biological Diversity second national reports. Funding and financial resources remain a problem for 32 per cent of responding countries, and 67 per cent indicate that resource levels are limiting or severely limiting, while 62 per cent of countries have or are in the process of reviewing legislation and economic policies to promote incentives. • Some 65 per cent of countries state that they have reviewed incentive measures promoted through the Kyoto Protocol and the United Nations Framework Convention on Climate Change, although a minority (16 per cent) are in developing ways of implementing such incentives.

Proposal for action	*Action towards implementation*

B. International cooperation in financial assistance and technology transfer

X. Support and promote local community involvement in sustainable forest management	• Second national reports to the Convention on Biological Diversity indicate that most countries (65 per cent) have some measures in place that promote international technical and scientific cooperation in the field of sustainable forest management. Many such measures pay attention to the development of national capabilities by means of human resources development and institution building (66 per cent). The incorporation, development and use of indigenous people's technologies frequently remain in the early stages of development (52 per cent). Access to and transfer of technology is of high-to-medium priority in approximately 70 per cent of countries; however, funding availability for implementation is problematic (approximately 70 per cent cite it as being limited or severely limited). • The FAO Community Forestry Unit has played a major role in supporting community involvement through technical guidance, capacity-building and information dissemination. • IUCN has formed a working group on community involvement in forest management to draw and apply lessons from field experience and to persuade Governments to become more responsive to community conservation efforts.
XI. Provide financial support to activities in developing countries related to forest conservation	• First national reports to the Convention on Biological Diversity make little specific reference to this issue. • Second national reports indicate that 44 per cent of countries had received new and additional financial support to assist them in meeting their obligations under the Convention on Biological Diversity; in addition, 63 per cent of developed countries had provided financial assistance to another country to assist them. • Thirty-four nations, including 13 recipient countries, pledged US$ 2 billion to the restructured GEF core fund in 1994, and another US$ 2.75 billion was pledged for replenishment in 1998 for the period 1998-2002 for GEF-II; approximately 16 per cent of that total was allocated to projects within the forest ecosystems operational programme.
XII. Continue the implementation of measures aimed at external debt problems	• Approximately US$ 159 million debt has been retired in debt-for-nature swaps focusing on forests. • In 1998, the United States of America enacted the Tropical Forestry Conservation Act, which allows developing countries to restructure their debts to the United States in exchange for actions in support of tropical forest conservation. • Results of the questionnaire survey indicated that a minority of countries (<30 per cent) had conducted an analysis of the impacts of foreign debt and had explored innovative financial approaches.

Proposal for action	*Action towards implementation*
C. International organizations and multilateral institutions and instruments	
XIII. Contribute to a global and regional assessment of the status of protected forest areas	• An assessment was provided by FAO as part of the Global Forest Resources Assessment 2000. • The FAO *State of the World's Forests* reports every two years on the status of forests, and includes an assessment of forest in protected areas; the most recent report covers 2001. • The UNEP World Conservation Monitoring Centre has assessed the protection status of forests at global and regional levels, most recently in 2000.
XIV. Undertake efforts in developing criterion and indicators for sustainable forest management	• Relevant actions are referred to in 35 per cent of national reports to the Commission on Sustainable Development. • At least 140 countries are participating in at least one of the nine major processes on criteria and indicators, which include the ITTO, Dry Zone Africa, Pan-European, Montreal, Tarapoto and Lepaterique initiatives.
XV. Explore innovative ways to use financial mechanisms to support activities for the management and conservation of forests	• A review undertaken by FAO provided information on national forest funds in 41 countries, indicating that a large number of countries have established such funds to provide some degree of assured continuity in funding for their forest sectors. • Some countries, including Japan, Costa Rica, Colombia and the United States, transfer part of the revenues generated from water supply and hydropower generation to finance forest management programmes in the watersheds. • Considerable progress has been made in building consensus on financing through an international process on financing strategies in (workshops were held in Pretoria in 1996, in Croydon, United Kingdom, in 1999 and in Oslo in 2001). • Recognizing that the private sector has a critical role in stopping forest degradation and loss, an ad hoc CEOs forum has established a series of working groups to produce recommendations on conservation and forest management.